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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/559,206	04/26/2000	Daniel Manhung Wong	OR00-01101	1513

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PARK, VAUGHAN & FLEMING LLP
508 SECOND STREET
SUITE 201
DAVIS, CA 95616

EXAMINER

TO, BAOQUOC N

ART UNIT	PAPER NUMBER
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2172

DATE MAILED: 11/05/2003

11

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/559,206

Applicant(s)

WONG, DANIEL MANHUNG

Examiner

Baoquoc N To

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: ____.

DETAILED ACTION

1. Claims 1-24 are pending in this application and 1, 9 and 17 are amended on amendment filed 08/18/03.

Response to Arguments

2. Applicant's arguments filed 08/18/03 have been fully considered but they are not persuasive.

The applicant argues, "Neither Maier nor Green, either separately or in concert, suggests or implies selectively auditing user access to a relational database based on the values of data being accessed."

In response to applicant's arguments, the recitation "selectively auditing" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 4-5, 7-9, 12-13, 15-17, 20-21 and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maier et al (US. Patent No. 5,625,815) in view of Green et al. (US. Patent No. 6,041,310).

Regarding on claims 1, 9, and 17, Maier teaches method for selectively auditing accesses to a relational database, comprising:

receiving a query for the relational database [col. 3, lines 65-67];

automatically modifying the query prior to processing the query, so that processing the query causes an audit record to be created and recorded only rows in relational tables that are accessed by the query and that satisfy an auditing condition, wherein satisfying the auditing condition allows selective auditing of the query [col. 4, lines 10-12];

processing the modified query to produce a query result [col. 6, lines 35-39], wherein

processing the modified query includes, creating the audit record for rows in relational tables that are accessed by the query and that satisfy the auditing condition [col. 8, lines 28-29], and

recording the audit record in an audit record store [col. 4, line 12]; and
returning the query result [col. 6, lines 35-39].

Maier does not explicitly teach automatically modifying the query prior to processing the query and creating the audit records for rows and satisfying the auditing condition wherein the auditing condition specifies a condition based on a value of a field in a row in the relational database. Maier teaches, "any new audit record in the audit trail 204 associated with the first object 200 are accessed and corresponding to the redo operation are performed against the second object 202" (col. 7, lines 8-11). This teaches the new audit record is creating records for rows. In addition, Maier also teaches, "an AuditTrail filter is establish such that only AuditTrail records that pertain to the Old Partition are received for processing (by an Audit Fixup Process started by the SQL catalog manager). The processing of each audit record that passes the filter is called and "audit fixup" (col. 8, lines 35-40). This teaches the AuditTrial filter is the auditing condition. In addition, Maier also teaches, "if the audit record is relevant to operations performed on the first object 200, or relevant to the subset of records of the first object that are the subject of the DDL command" (col. 6, lines 53-56). Furthermore, Maier also teaches, "each of audit entry 184 denotes database table or index record event such as the addition, deletion or alteration of a specified database table or index record in the database table or index (col. 5, lines 55-60). This clearly indicates relevant records are auditing conditions that allow the operation to access based on the index values of the records in the table. On the other hand, the method of modifying the query prior processing to redirect the query to perform the different request is known in

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the art. For example, Green discloses, "first, if non of the readership inventory matches the customer query exactly, terminal processor 10a automatically modifies the primary query to create the second query so that at least one vehicle is displayed" (col. 10, lines 63-66). This teaches modifying the query. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify the teaching of Green into Maier because automatically modifying query would allow the system to adapt to any changes and efficiently retrieve or create the results according to the changes.

Regarding on claims 4, 12 and 20, Maier teaches retrieving the auditing condition for a given table from a data structure associated with the given table [col. 6, lines 8-19].

Regarding on claims 5, 13 and 21, Maier teaches the query modifies at least one entry in the relational database, using a relational database system trigger to create and record the audit record for the modification to the relational database [col. 4, lines 10-12].

Regarding on claims 7, 15 and 23, Maier teaches the audit record includes:

a user name for a user making the query [col. 6, line 4];

a time stamp specifying a time of the query [col. 6, lines 4-10]; and

a text of the query [col. 6, lines 15-18].

Regarding on claims 8, 16 and 24, Maier teaches the auditing condition includes a condition for a field within the relational database [col. 5, lines 2-3].

4. Claims 2-3, 6, 10-11, 14, 18-19 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maier et al (US. Patent No. 5,625,815) in view of Green et al. (US. Patent No. 6,064,951) and further in view of Cochrane et al. (US. Patent No. 6,041,310).

Regarding on claims 2, 10, and 18, Maier and Park teaches the claimed subject matter excepting the query includes a select statement, inserting a case statement into the select statement that calls a function that causes the audit record to be created and recorded if the auditing condition is satisfied. However, Cochrane teaches, SELECT 1 FROM VALUES (1)

WHERE 1>CASE WHEN EXIST (SQL-stmt1 WHERE 1=0)

THEN

....

WHEN EXIST (SQL-stmtn WHERE 1=0)

THEN 1

ELSE 1 END" [col. 8, lines 55-50];

This teaches that the case statement is inserted in the selected SQL statement to call the function. Cochrane does not teach the function that causes audit record to be created and recorded if the auditing condition is satisfied. However, this function can be modified to accommodate the requirements by putting the required parameters to create the auditing records. Therefore, it would have been obvious to one ordinary skill in the

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art at the time of the invention was made to include teaching of Cochrane into Maier and Park because inserting the case statement in to the SELECT statement in Cochrane to allow the function to create auditing records.

Regarding on claims 3, 11, and 19, Cochrane teaches ensuring that the case statement is evaluated near the end of the query processing so that the case statement is evaluated only after other conditions of the query are satisfied, so that the audit record is created only for rows that are actually accessed by the query (col. 8, lines 55-60).

Regarding on claims 6, 14, and 22, Cochrane teaches,
inserting the case statement into the query (col. 8, lines 55-60);
allowing a query processor to allocate buffers for the query (col. 8, lines 55-60);
removing the case statement from the query (col. 8, lines 55-60);
allowing the query processor to generate a query plan for the query; and
scheduling the case statement near the end of the query plan to ensure that the case statement is evaluated only after other conditions of the query are satisfied, so that the audit record is created only for rows that are actually accessed by the query (col. 8, lines 55-60).

Contact Information

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5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Baoquoc N. To whose telephone number is (703) 305-1949 or via e-mail BaoquocN.To@uspto.gov. The examiner can normally be reached on Monday-Friday: 8:00 AM – 4:30 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y. Vu can be reached at (703) 305-4393.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231.

The fax numbers for the organization where this application or proceeding is assigned are as follow:

- (703) 746-7238 [After Final Communication]]
- (703) 746-7239 [Official Communication]
- (703) 746-7240 [Non-Official Communication]

Hand-delivered responses should be brought to:

Crystal Park II
2121 Crystal Drive
Arlington, VA 22202
Fourth Floor (Receptionist).

Baoquoc N. To

Oct 28, 2003



SHAHID ALAM
PRIMARY EXAMINER